

SPRINT-3

Date	19 NOVEMBER 2022
Team ID	PNT2022TMID37262
Project Name	SMART SOLUTIONS FOR RAILWAYS

PROCEDURE:

Step1: Develop a python script to scan the QR code

Step2: Connect the python code to IBM Cloudant using the credentials

Step3: Run the program

PYTHON SCRIPT TO SCAN QR CODE:

```
import cv2
import numpy as np
import time
import pyzbar.pyzbar
```

```
from pyzbar.pyzbar import decode
from
```

```
ibmcloudant.cloudant_v1 import CloudantV1
from ibmcloudant
```

```
import CouchDbSessionAuthenticator
from
```

```
ibm_cloud_sdk_core.authenticators import BasicAuthenticator
```

```
authenticator = BasicAuthenticator('apikey-v2-125rwcp4ifi6zz2ly1cq0kakyjn98du2ysgc72h53lzi',
'af693938842290ec2c254461754447b5')
service =
```

```
CloudantV1(authenticator=authenticator)
```

```
service.set_service_url('https://apikey-v2-
```

```
125rwcp4ifi6zz2ly1cq0kakyjn98du2ysgc72h53lzi:af693938842290ec2c254461754447b5@82d8749943954f
46-a190-6a186bee5051-bluemix.cloudantnosqldb.appdomain.cloud')
```

```
cap= cv2.VideoCapture(0)
font =
```

```
cv2.FONT_HERSHEY_PLAIN
while
```

```
True:
```

```

_, frame = cap.read()  decodedObjects = pyzbar.decode(frame)  for
obj in decodedObjects:    #print ("Data", obj.data)

a=obj.data.decode('UTF-8')    cv2.putText(frame, "Ticket", (50,

50), font, 2, (255, 0, 0), 3)

    #print (a)

    try:

        response = service.get_document(db='booking',doc_id = a).get_result()    print(response)

time.sleep(5)    except Exception as e:

    print("NOT A VALID TICKER")

time.sleep(5)


cv2.imshow("Frame",frame)  if cv2.waitKey(1)

& 0xFF ==ord('q'):

    break


cap.release() cv2.destroyAllWindows()

client.disconnect()

```

PYTHON CODE OUTPUT:



QR CODE DETAILS:

```
IDLE Shell 3.9.6
File Edit Shell Debug Options Window Help
Python 3.9.6 (tags/v3.9.6:db3ff76, Jun 28 2021, 15:26:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Nishanth G\AppData\Local\Programs\Python\Python39\pythoncam.py
{'id': '2022-11-15,11:34:34', 'rev': '1-dc28604ce92b95da395e5e9a40018fef', 'Name': 'SUDHA', 'Age': 20, 'Mobile': 8976543212, 'boarding': 'Coimbatore', 'destination': 'Chennai', 'Seat': '2', 'Train selection': 'Blue mountain'}
```

DATA STORED IN CLOUDANT:

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Log Out

booking > 2022-11-15,11:34:34

{ } JSON

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✔ Save Changes

Cancel

📎 Upload Attachment

🔄 Clone Document

🗑 Delete

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```
"_id": "2022-11-15,11:34:34",
"_rev": "1-dc28604ce92b95da395e5e9a40018fef",
"Name": "SUDHA",
"Age": 20,
"Mobile": 8976543212,
"boarding": "Coimbatore",
"destination": "Chennai",
"Seat": "2",
"Train selection": "Blue mountain"
```